

# Bachelor of Engineering (Honours) (Mechanical) / Bachelor of

Business (Finance)

**BB-EMEBUS3** 

Semester 2 | 2022

#### **Recommended Sequence**

Units are listed on your Course Planner in a recommended sequence. However, this can be amended depending on unit availability, unit progression, timetabling and the semester in which you commenced your course.

# Year One

| Semester 1   Aug/Sept 2022 |   |                |  |  |
|----------------------------|---|----------------|--|--|
| Unit Code                  | Unit Name   | Pre-requisites |  |  |
| ENG10003                   | Mechanics of Structures   | Nil            |  |  |
| ENG10004                   | Digital and Data Systems  | Nil            |  |  |
| MTH10013                   | Linear Algebra and Applications   | Nil            |  |  |
| PHY10004                   | Electronics and Electromagnetism  | Nil            |  |  |
| Semester 2   Feb/Mar 2023  |   |                |  |  |
| ENG10001                   | Engineering, Design and Innovation  | Nil            |  |  |
| ENG10002                   | Engineering Materials   | Nil            |  |  |
| MTH10012                   | Calculus and Applications   | Nil            |  |  |
| PHY10001                   | Energy and Motion   | Nil            |  |  |
| MPU3193                    | Philosophy and Current Issues<br>(Malaysian and International Students)                 | Nil            |  |  |
| Winter Term   July 2023    |   |                |  |  |
| MPU3212                    | Bahasa Kebangsaan A<br>(Malaysian students who do not have SPM Bahasa<br>Melayu credit) | Nil            |  |  |

### Year Two

| Semester 3   Aug/Sept 2023 |                  |   |                                   |  |  |
|----------------------------|------------------|---|-----------------------------------|--|--|
|                            | Unit Code        | Unit Name   | Pre-requisites                    |  |  |
|                            | MTH20011         | Mathematics 4A  | MTH10013 & MTH10012               |  |  |
|                            | MEE20005         | Materials & Manufacturing 1                                     | ENG10002                          |  |  |
|                            | MEE20003         | Fluid Mechanics 1   | MTH10013 & MTH10012               |  |  |
|                            | MEE20006         | Machine Dynamics 1  | MTH10013 & MTH10012 &<br>PHY10001 |  |  |
|                            | MPU3183          | Penghayatan Etika dan Peradaban<br>(Malaysian Students Only)    | Nil                               |  |  |
|                            | MPU3143          | Malay Language Communication 2<br>(International Students Only) | Nil                               |  |  |
|                            | Semester 4   Feb | o/Mar 2024  |                                   |  |  |
|                            | MEE20002         | Computer Aided Engineering Mechanical                           | ENG10001                          |  |  |
|                            | MEE20004         | Structural Mechanics  | ENG10003                          |  |  |
|                            | MEE20001         | Thermodynamics  | PHY10001                          |  |  |
|                            | MTH20010         | Mathematics 3A  | MTH10013 & MTH10012               |  |  |
|                            |                  |   |                                   |  |  |

# Year Three

| Semester 5 | Aug/Sept <b>2024</b>                            |                      |
|------------|---|----------------------|
| Unit Code  | Unit Name                                       | Pre-requisites       |
| MEE40001 * | Heat Transfer                                   | MTH20010             |
| MEE30004 * | Solid Mechanics                                 | MEE20004             |
| ACC10007   | Financial Information for Decision<br>Making    | Nil                  |
| MKT10007   | Fundamentals of Marketing                       | Nil                  |
| EAT20008 # | Professional Experience in Engineering          | Introductory Seminar |
| Semester 6 | Feb/Mar 2025                                    |                      |
| MEE30001 * | Materials and Manufacturing 2                   | MEE20005             |
| MEE30003 * | Machine Design                                  | MEE20004             |
| ECO10004   | Economic Principles                             | Nil                  |
| INF10003   | Introduction to Business Information<br>Systems | Nil                  |

# Year Four

| Semester 7   Aug/Sept 2025 |                                 |                     |  |  |
|----------------------------|---------------------------------|---------------------|--|--|
| Unit Code                  | Unit Name                       | Pre-requisites      |  |  |
| MEE40002 *                 | Mechanical Systems Design       | MEE30003            |  |  |
| MME30001 *                 | Engineering Management 1        | 100 credit points   |  |  |
| FIN10002                   | Financial Statistics            | Nil                 |  |  |
| FIN20016                   | Ethics of International Finance | ECO10004            |  |  |
| Semester 8   Feb/Mar 2026  |                                 |                     |  |  |
| MEE30002 *                 | Control Engineering             | MTH20011            |  |  |
| MME40001 *                 | Engineering Management 2        | 100 credit points   |  |  |
| FIN20014                   | Financial Management            | ACC10007 & FIN10002 |  |  |
| LAW20045                   | Finance Law                     | 125 credit points   |  |  |

### How to use your Course Planner

Refer to the below table to help explain what units are required each semester throughout your course. The units in your planner are colour coded to assist you with mapping out your studies.

#### **Course Information**

Each unit is equivalent to 12.5 credit points.

To qualify for the award of this course, students must complete 41 units (500 credit points) in addition of the General Studies/Mata Pelajaran Umum, comprising of:

#### **12 Core Units** 150 credit points

A set of compulsory units you MUST complete as part of your Course.

#### **16 Mechanical Major Units** 200 credit points

A set of compulsory units you MUST complete as part of your Course.

### 12 Finance Major Units

150 credit points

A set of compulsory units you MUST complete as part of your Course.

#### **1 Industry Placement Unit** 0 credit point

A compulsory, not-for-credit unit

**General Studies/Mata Pelajaran Umum** 0 credit points

\* Compulsory units to complete as a pre-

requisite to graduate (see statement below) \* Advisable to enrol in Year One

\* Email <u>ltu@swinburne.edu.my</u> for queries

All commencing students of Master, Degree, Diploma and Foundation courses will be automatically registered for the **Academic Integrity Training Module** in the first semester (Note: Students articulating from Foundation Studies are expected to undertake this unit as a refresher). There are 4 topics in this online module that are recommended for completion during Week 1-4 of your commencing study period. At the end of this module, students are required to complete a quiz comprised of 10 questions and achieve a score of at least 90%.

Ministry of Education requires that all NEW Cohorts pursuing Degree course (International and Malaysian) students must take the MPU units as a prerequisite for the award of their degree.

• Malaysian students: Must take and

# Year Five

pass the units as a prerequisite for the award of their degree.

International students: Must take and pass the units as a prerequisite for the award of their degree

| Semester 9   Aug/Sept 2026 |   |   |  |  |
|----------------------------|---|---|--|--|
| Unit Code                  | Unit Name                               | Pre-requisites  |  |  |
| MEE40004 *                 | Fluid Mechanics 2                       | MEE20003  |  |  |
| ENG40003 *                 | Final Year Research Project 1 (Eng/Bus) | 350 credit points &<br>MKT10007, ECO10004,<br>ACC10007 and INF10003 |  |  |
| FIN30014                   | Financial Risk Management               | FIN20014  |  |  |
| FIN30020                   | Alternative Investments                 | FIN20014  |  |  |
| Semester 10   Feb/Mar 2027 |   |   |  |  |
| MEE40003 *                 | Machine Dynamics 2                      | MEE20006  |  |  |
| ENG40004 *                 | Final Year Research Project 2 (Eng/Bus) | ENG40003  |  |  |
| FIN30016                   | Management of Investment Portfolios     | FIN20014  |  |  |
| FIN30021                   | Fixed Income and Debt Markets           | FIN20014  |  |  |
| Notos                      |   |   |  |  |

#### Notes

- # EAT20008 Professional Experience in Engineering is compulsory for all engineering students and must be taken before the last semester of study as part of EAC's requirement. Introductory Seminar will be conducted in week 4 of normal semester.
- \* Honours merit units.